

WHAT IS CLAIMED IS:

1. A mobile communication system comprising:

a plurality of transfer devices configured to transfer
5 packets to a visited position of a mobile terminal;

a plurality of connection management devices arranged in
a network and configured to connect to the mobile terminal;
and

a mobile terminal including:

10 a detection unit configured to detect the transfer device,
and

a communication unit configured to connect to the connection
management device, and transmit/receive packets to/from the
transfer device detected by the detection unit via the connection
15 management device.

2. A mobile terminal comprising:

a detection unit configured to detect a transfer device
transferring packets to a visited position of the mobile terminal;
20 and

a communication unit configured to connect to a connection
management device arranged in a network and connecting to the
mobile terminal, and transmit/receive packets to/from the
transfer device detected by the detection unit via the connection
25 management device.

3. The mobile terminal of claim 2, further comprising:

a selection criterion storage unit configured to store a
selection criterion for selecting the transfer device to be used
30 for transfer of the packets; and

a selection unit configured to select the transfer device
to be used, from among the transfer devices detected by the
detection unit, based on the selection criterion stored in the
selection criterion storage unit; wherein

35 the communication unit transmits/receives the packets

to/from the transfer device selected by the selection unit.

4. The mobile terminal of claim 2, further comprising:

a transfer device information storage unit configured to
5 store addresses of the transfer devices; and

a query packet creation unit configured to create a query
packet for searching for the transfer device, and to be transmitted
to an address stored in the transfer device information storage
unit; wherein

10 the communication unit transmits the query packet created
by the query packet creation unit, and receives a notification
packet for notifying the address of the transfer device returned
from at least one of a query packet reception transfer device
receiving the query packet and a peripheral transfer device other
15 than the query packet reception transfer device, in response to
the query packet; and

the detection unit detects the transfer device based on
the notification packet received by the communication unit.

20 5. The mobile terminal of claim 4, further comprising:

a decision unit configured to decide inter-mobile-terminal
information between the peripheral transfer device and the mobile
terminal, based on inter-mobile-terminal information between the
query packet reception transfer device and the mobile terminal,
25 and inter-transfer-device information between the query packet
reception transfer device and the peripheral transfer device
included in the notification packet.

6. The mobile terminal of claim 2, further comprising:

30 a data creation unit configured to create data for
investigating transfer device information concerning the
transfer device, and to be transmitted to the transfer device
detected by the detection unit; wherein

the communication unit transmits the data created by the
35 data creation unit, and receives response data returned from the

transfer device, in response to the data.

7. A transfer device comprising:

a transfer device information storage unit configured to
5 store addresses of a plurality of transfer devices;

a notification packet creation unit configured to acquire
an address of the transfer device stored in the transfer device
information storage unit and create a notification packet for
notifying the address of the transfer device; and

10 a communication unit configured to transmit/receive
packets to/from a mobile terminal, via a connection management
device arranged in a network and connecting to the mobile terminal,
transmit the notification packet created by the notification
packet creation unit, and transfer the packets to a visited
15 position of the mobile terminal.

8. The transfer device of claim 7, wherein the notification
packet creation unit creates the notification packet in at least
one of cases where the communication unit has received a query
20 packet for searching for the transfer device from the mobile
terminal, where the communication unit has received the
notification packet from an other transfer device, and where the
communication unit has received a notification initiator packet
for requesting the other transfer device to transmit the
25 notification packet to the mobile terminal, from the other
transfer device.

9. The transfer device of claim 7, further comprising:

an initiator packet creation unit configured to create a
30 notification initiator packet for requesting an other transfer
device to transmit the notification packet to the mobile terminal;
wherein

the communication unit transmits the notification
initiator packet created by the initiator packet creation unit
35 to the other transfer device.

10. The transfer device of claim 9, wherein the initiator packet creation unit creates the notification initiator packet in at least one of cases where the communication unit has received a query packet for searching for the transfer device from the mobile terminal, where the communication unit has received the notification packet from the other transfer device, and where the communication unit has received the notification initiator packet from the other transfer device.

11. The transfer device of claim 8 or 10, wherein the notification initiator packet is transmitted to a peripheral transfer device other than a query packet reception transfer device receiving the query packet.

12. A transfer device comprising:

a communication unit configured to transmit/receive packets to/from a mobile terminal via a connection management device arranged in a network and connecting to the mobile terminal, and transfer the packets to a visited position of the mobile terminal;

a determination unit configured to determine whether a packet received by the communication unit is a packet from a mobile terminal allowed to use packet transfer performed by the transfer device; and

a transfer management unit configured to manage transfer of the packets to the visited position based on a determination result by the determination unit.

13. The transfer device of claim 12, further comprising:

a terminal information storage unit configured to store terminal information unique to the mobile terminal allowed to use the packet transfer; wherein

the determination unit determines based on whether information concerning the mobile terminal included in the packet

received by the communication unit coincides with the terminal information stored in the terminal information storage unit.

14. The transfer device of claim 12, further comprising:

5 a data storage unit configured to store common data commonly assigned to the mobile terminals allowed to use the packet transfer; wherein

the determination unit determines based on whether data included in the packet received by the communication unit
10 coincides with the common data stored in the data storage unit.

15. A mobile communication method comprising:

detecting a transfer device transferring packets to a visited position of a mobile terminal, by the mobile terminal;

15 connecting to a connection management device arranged in a network and connecting to the mobile terminal, by the mobile terminal; and

transmitting/receiving packets to/from a detected transfer device via the connection management device, by the mobile
20 terminal.

16. A mobile communication method comprising:

determining whether a packet received from a mobile terminal via a connection management device arranged in a network and
25 connecting to the mobile terminal is a packet from a mobile terminal allowed to use packet transfer performed by a transfer device transferring packets to a visited position of the mobile terminal; and

managing transfer of the packets to the visited position
30 based on a determination result, by the transfer device.